Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

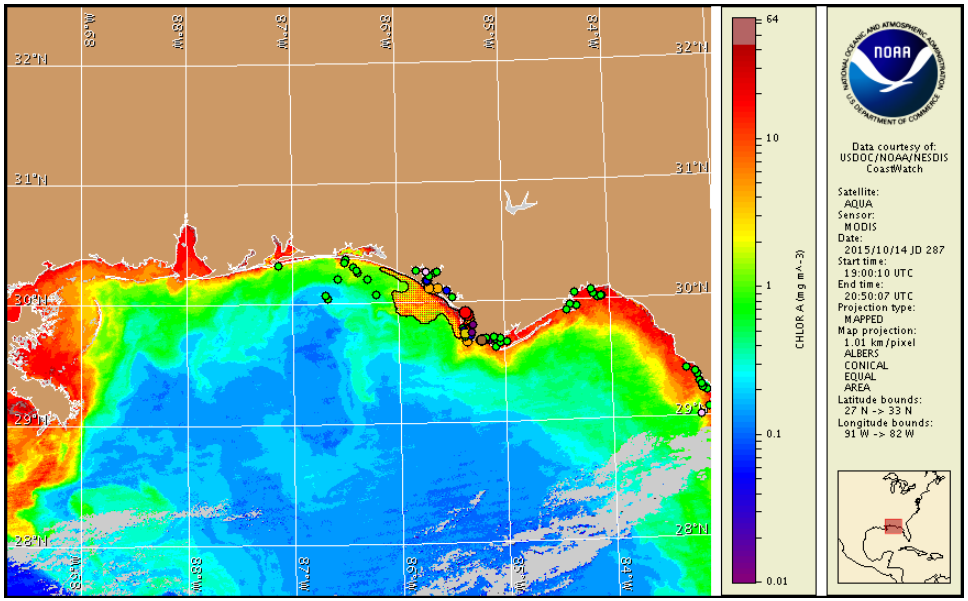
Thursday, 15 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 13, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 5 to 14: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Thursday, October 15 to Monday, October 19 is listed below:

County Region: Forecast (Duration)
Bay County: Moderate (Th-Sa), Low (Su-M)
Bay County, bay regions: Moderate (Th-Sa), High (Su-M)
Gulf County: Moderate (Th, Sa), High (F), Low (Su-M)
Gulf County, west bay regions-St. Joseph Bay area: Moderate (Th-M)
Gulf County, east bay regions-Indian Lagoon area: Low (Th-M)
Franklin County, bay regions: Very Low (Th-M)
All Other NWFL County Regions: None expected (Th-M)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of dead fish have been received alongshore Gulf and Bay counties. Reports of respiratory irritation have been received from alongshore Bay County.

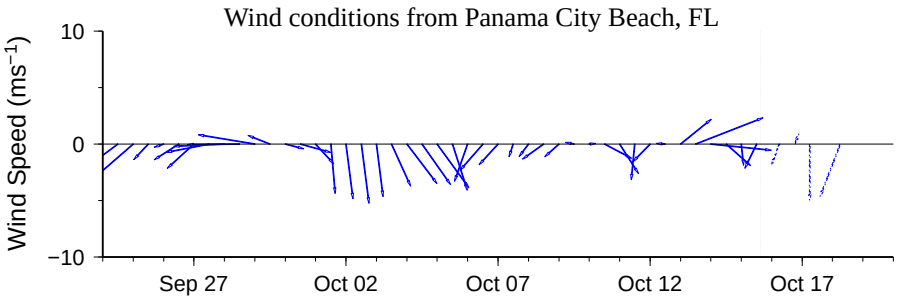
Analysis

Samples collected over the past week alongshore northwest Florida from Escambia to Taylor counties continue to identify background to 'high' *Karenia brevis* concentrations alongshore Bay to Gulf counties, with the highest concentrations identified alongshore Gulf County (FWRI; 10/9-10/13). Recent samples indicate an increase in concentrations from not present to 'low a' in the Indian Lagoon area of Gulf County (FWRI; 10/13). All other samples collected along- and offshore Escambia, Okaloosa, and Wakulla counties indicated that *K. brevis* is not present (FWRI; 10/10/9-13). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus. Fish kills have been reported alongshore Mexico Beach and St. Andrews Bay in Bay County and alongshore the Port St. Joe area in Gulf County (FWRI; 10/13-14). Respiratory irritation has been reported alongshore Mexico Beach in Bay County (FWRI; 10/14).

In recent ensemble imagery (MODIS Aqua, 10/14), a feature of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* is visible alongshore northwest Florida from Walton to Franklin counties, extending up to 22 miles offshore Bay and Gulf counties.

Variable winds forecast alongshore northwest Florida today through Monday will minimize the potential for transport or intensification of *K. brevis* concentrations at the coast.

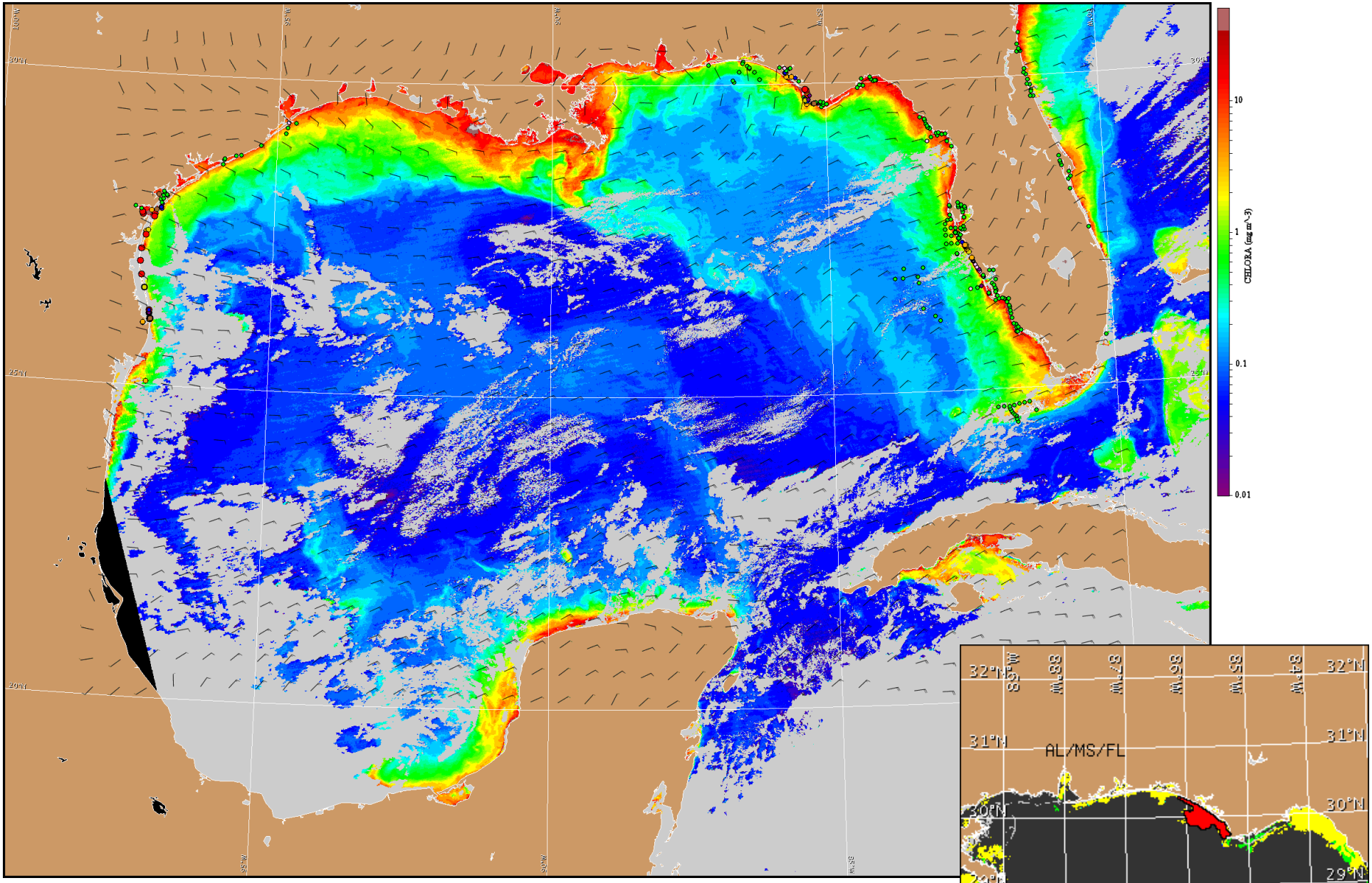
Derner, Keeney



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Taylor counties: Northeast winds today (10kn, 5m/s) becoming variable (5kn, 3m/s) in the afternoon. Northeast winds (5-10kn, 3-5m/s) tonight. East winds (5-10kn) Friday shifting onshore Friday afternoon. West winds (5-10kn) Friday night. North winds (15kn, 8m/s) Saturday becoming northeast (15-20kn, 8-10m/s) Saturday night through Monday.



Satellite chlorophyll image and forecast winds for October 16, 2015 06Z with points representing cell concentration sampling data from October 5 to 14: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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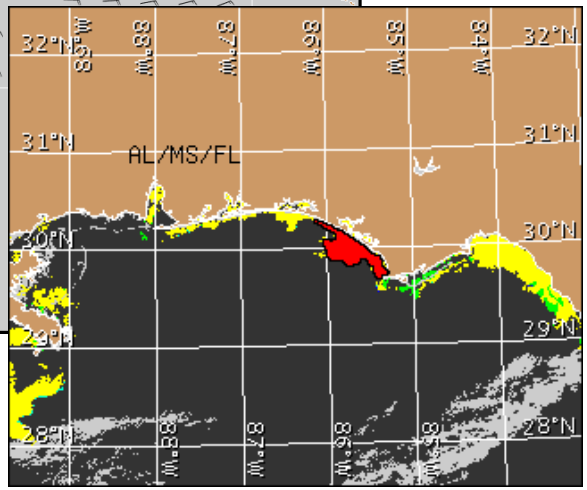

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).